

Originator Parks and Recreation	Item Wildlife Management Fencing
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Date
9/9/2015

Description

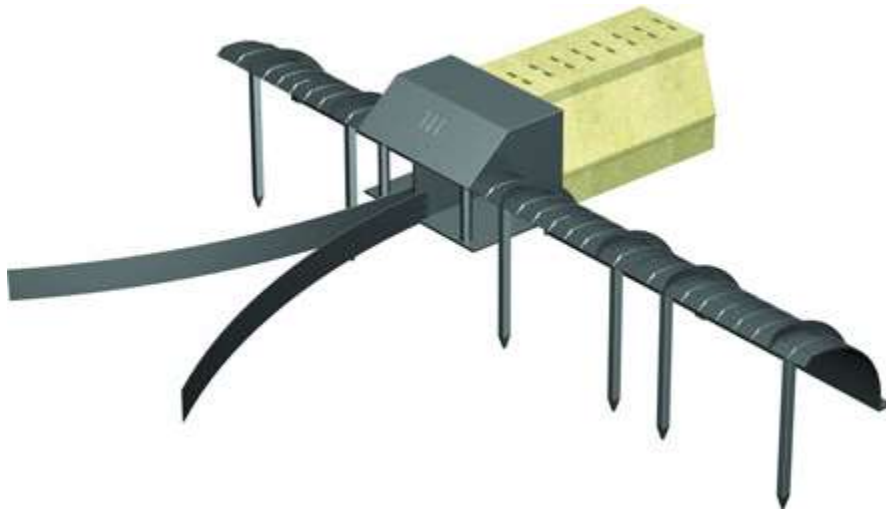
Over the past several months City staff has been reviewing options to reduce turtle mortality rates along East Bush Lake Road adjacent to Bush Lake. Each spring turtles migrate from deep water in Bush Lake across East Bush Lake Road to nesting grounds in Hyland Park. Multiple turtles are annually struck and killed by motor vehicles as they cross East Bush Lake Road. The two primary areas of concern are adjacent to the Bush Lake Beach entrance, and along the southeast section of Bush Lake. Turtles then cross back over East Bush Lake Road in the fall to return to Bush Lake.

A few months ago, staff met with representatives of the Minnesota Herpetological Society and Three Rivers Park District on site at Bush Lake to review options to reduce turtle mortality rates:

1. Install signs seasonally along East Bush Lake Road warning motorists of turtles crossing the road. City staff indicated that this would not be approved as the signs are ineffective.
2. Have people help the turtles cross the road. This is problematic due to safety concerns for the humans helping the turtles. East Bush Lake road is a two-lane road with limited width shoulders and reduced sight lines at curves. Vehicles pulling over to assist turtles are inherently dangerous due to the potential of rear end collisions with parked vehicles. Suggestion was made to form a volunteer group to assist turtles cross the road. Due to safety concerns for the volunteers, the City could not support/sanction such a volunteer effort. Enclosed is a flyer from the MnDNR addressing turtles and roadways safety concerns.
3. Place a sign seasonally at the exits from East and West Bush Lake Parks encouraging people to be on the lookout for turtles crossing the road. In June the City installed a sign at the exit from Bush Lake Beach (see photo on next page).



4. Provide information on the City website and other media outlets as to the annual turtle migration concerns. The City has placed this information on the City website at <https://www.bloomingtonmn.gov/give-turtles-brake>.
5. Install a tunnel or culvert under East Bush Lake Road to facilitate turtle migration (similar to the tunnel Washington County installed near Big Marine Lake – see below graphic). Due to the topography in this area, the high water table and the high costs for such a project, this suggestion is not currently feasible.



6. Install fencing between the trail and Bush Lake to keep the turtles from crossing East Bush Lake Road. While the nesting habitat along the Bush Lake shoreline is not as preferable as that in Hyland Park, it should be adequate for those turtles denied the ability to cross East Bush Lake Road (see below graphic of suitable habitat characteristics).

Characteristics of Suitable Turtle Nesting Habitat



Plenty of
potential
sun
exposure

No or little
overhead tree
or shrub
canopy cover

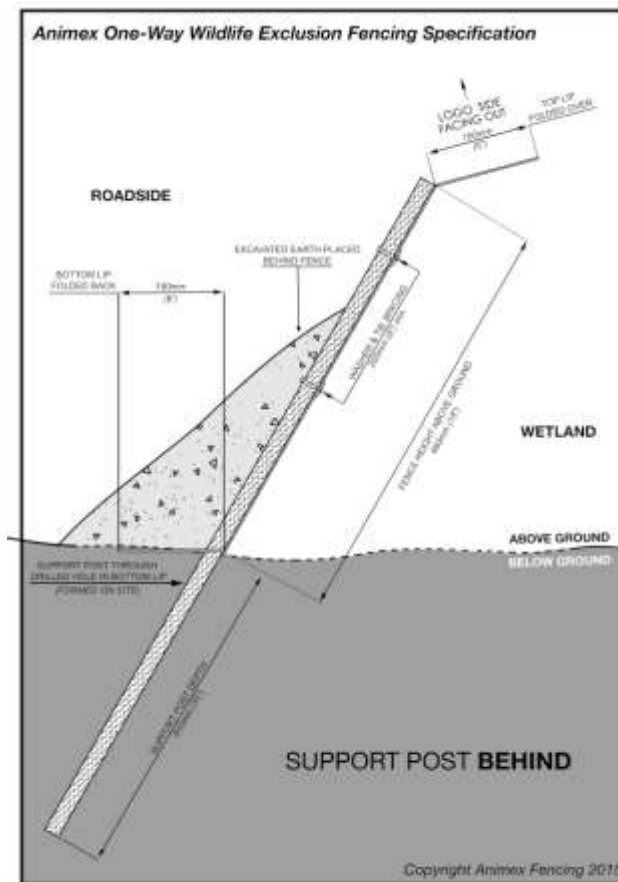
Suitable
aquatic
habitat
nearby

Low stature,
patchy
vegetation

...would have a “J” curve at the end to turn turtles around and keep them behind the fence. It should be noted that fencing will not corral all turtles, as some (Snapping Turtles) can climb fences (see below photos.)



8. The consensus of those attending the meeting was to explore installing a fence from the fishing pier adjacent to Bush Lake Beach to the old Nesbitt homestead site, a total length of approximately 2,800 linear feet. If deemed effective, additional fencing could be considered. Below are the details of the fencing proposal:
- a. Utilize 24" to 36" high fencing. Below are some options:
 - i. Chain link fencing secured with metal posts. The cost would be approximately \$15.00 per linear foot for 36" high fencing installed (2,800' @ \$15.00 = \$42,000). Additional maintenance costs annually to reset posts due to frost heaving.
 - ii. Erosion control fencing (green or black) secured with wooden posts. The cost would be approximately \$6.00 per linear foot for 24" high fencing installed (2,800' @ \$6.00 = \$16,800).
 - iii. Plastic snow fencing (green or black) secured with t-posts, zip-ties and landscaping staples. The cost would be approximately \$1.00 per linear foot for 24" high fencing (supplies only - 2,800' @ \$1.00 = \$2,800).
 - iv. Animex wildlife exclusion fencing (see below graphic). 24" tall fabric secured with posts and partially buried. The cost for materials and shipping would be approximately \$16,316 for a permanent install (two layers of fabric), or \$11,256 for a temporary install (one layer of fabric). Does not include installation costs.



- b. Install the fencing approximately two feet into the taller grasses around the lake, thereby creating a vegetative sight barrier linear – thereby reducing the aesthetics of the fencing and potential opposition of those who want an unencumbered view of the lake.

- c. Place the fencing as far away from the water as practicable to maximize the amount of nesting space.
 - d. Install signs along the fence informing the public of the wildlife management pilot project.
9. Establish a monitoring program to determine the effectiveness of the fencing – does the fencing reduce turtle mortality rates?
 10. Discuss safety issues with fencing placed within tall grasses. This could create a trip hazard. Need to weigh aesthetics vs. visibility/safety.
 11. Explore options to seek donations and/or grants to cover project costs. Consider using volunteers to install the fencing, perhaps work in cooperation with the Izaak Walton league – Bush Lake Chapter. This could also be a good Eagle Scout project.
 12. Discuss potential opposition to the fencing project, such as those who may feel the fencing cuts off access to the lake for recreational activities such walking or shore fishing.

Staff will lead a discussion of the proposed wildlife management fencing pilot project at the September 9 meeting and seek direction from the PARC on this matter.

Requested Action

Provide input to Staff.

Attachments: